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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 708-2019

**Dimension, shape, weight and tolerance for cold-rolled steel
strip and sheet**

冷轧钢板和钢带的尺寸、外形、重量及允许偏差

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Table of Contents

1	Scope
2	Normative references
3	Terms and definitions
4	Classification and code
5	Dimensions
5.1	Dimension range
5.2	Recommended nominal dimensions
6	Dimension tolerances
6.1	Thickness tolerance
6.2	Width tolerance
7	Shape
7.1	Flatness
8	Measurement of dimensions and shape
8.1	Thickness
8.3	Flatness
9	Weight
10	Rounding off of numerical values

Foreword

This Standard is drafted in accordance with the rules given in GB/T 1.1-2009. This Standard replaces GB/T 708-2006 "Dimension, shape, weight and tolerance for cold-rolled steel plates and sheets". Compared with GB/T 708-2006, the main technical changes of this Standard are as follows: - MODIFY the thickness and width ranges of steel sheets and strips (see

5.1 of this Standard,

5.1 of 2006 edition); - MODIFY the thickness tolerance of steel sheets and strips, which is specified respectively according to the specified minimum yield strength $Re < 260 \text{ MPa}$, $260 \text{ MPa} \leq Re < 340 \text{ MPa}$, $340 \text{ MPa} \leq Re \leq 420 \text{ MPa}$, $Re > 420 \text{ MPa}$ (see Table 2, Table 3, Table 4, Table 5 of this Standard, Table 2 of 2006 edition); - ADD the higher precision (PW.B) of width tolerance of slit wide strips and its requirements; MODIFY the width tolerance of slit wide strips (see

6.2.3 of this Standard,

6.2.2 of 2006 edition); - MODIFY the flatness of steel sheets and strips according to the specified minimum yield strength $Re < 280 \text{ MPa}$, $280 \text{ MPa} \leq Re < 360 \text{ MPa}$, $Re < 260 \text{ MPa}$, $260 \text{ MPa} \leq Re < 340 \text{ MPa}$; MODIFY the requirements for flatness (see

7.1 of this Standard,

7.1 of 2006 edition); - ADD the requirement that steel sheets and strips are supplied according to general precision when the thickness tolerance, width tolerance, length tolerance and flatness are default (see 6.1.6, 6.2.2, 6.3, 7.1.1); - ADD the negotiation terms when the yield strength and requirements are not specified in the thickness tolerance and flatness requirements of steel sheets and strips in the product standard (see 6.1.5, 7.1.5); - MODIFY the requirements for camber (see

7.2 of this Standard,

7.2 of 2006 edition); - MODIFY the "cutting angle" to "out-of-squareness"; ADD the method and requirements for the measurement of out-of-squareness using the diagonal method (see

7.3 of this Standard,

7.3 of 2006 edition); - ADD the requirements for the measurement position of flatness of steel strips (see 8.3.3); - ADD the schematic diagram of the measurement of out-of-squareness using the diagonal method [see 8.5b)]. This Standard was proposed by China Iron and Steel Industry Association. This Standard is under the jurisdiction of National Technical Committee on Steel of Standardization Administration of China (SAC/TC 183). Drafting organizations of this Standard. China Metallurgical Information and Standardization Institute, Tangshan Branch of Hebei Iron and Steel Co., Ltd., Guangxi Liuzhou Iron and Steel Group Co., Ltd., Shougang Group Co., Ltd., Anshan Iron and Steel Co., Ltd., Baoshan Iron and Steel Co., Ltd. Main drafters of this Standard. Hou Jie, Zhang Weixu, Li Qian, Deng Cuiqing, Gan Guiping, Tang Mu, Su Haolu, Hu Ling, Xu Feng, Tan Cuiying. The previous released versions replaced by this Standard are as follows: - GB 708-1965, GB 708-1988, GB/T 708-2006. Dimension, shape, weight and tolerance for cold-rolled steel strip and sheet

1 Scope

China's national standard for the dimensions, shape, weight and tolerances of cold-rolled steel strip and sheet. This is one of the documents on which the whole steel trade is transacted, because it defines what is actually being sold. Steel sheet is bought by weight and used by area, so the thickness tolerance determines how much material a customer receives for his money and whether a stamping will be within its own tolerance. Shape is the subtler and often more consequential requirement: flatness, edge wave, crossbow and camber are the results of uneven rolling and internal stress, and a coil that is dimensionally correct but not flat will not feed straight through a press line, will spring after cutting, and

can be unusable for laser cutting whatever its thickness. The standard specifies the terms and definitions, classification and codes, dimensions and dimensional tolerances, shape requirements, methods of measuring dimensions and shape, weight and rounding, and applies to cold-rolled wide strip, slit wide strip and sheet cut from strip of rolling width 600 mm and above.

This Standard specifies terms and definitions, classification and code, dimensions, dimension tolerances, shape requirements, measurement of dimensions and shape, weight and rounding off of numerical values of cold- rolled steel sheets and strips. This Standard applies to cold-rolled wide strips, slit wide strips and sheets cut from strip of which the rolling width is not less than 600 mm (hereinafter referred to as steel sheets and strips). Steel plates may also refer to this Standard.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

GB/T 8170 Rules of rounding off for numerical values & expression and judgement of limiting values

3 Terms and definitions

For the purpose of this document, the following terms and definitions apply.

3.1 wide strip Steel strips with a width of not less than 600 mm and delivered in rolls.

3.2 slit wide strip Slit from wide strips and delivered in rolls.

3.3 sheet cut from strip Cut form steel strips and delivered in sheets.

4 Classification and code

4.1 Classification according to edge state is as follows:

4.2 Classification according to dimension precision and code is as follows:

4.3 Classification according to flatness precision and code is as follows:

4.4 Classification of dimensions and precision of flatness corresponding to product shape and edge state is shown in Table 1.

5.1 Dimension range

5.1.1 The nominal thickness of steel sheets and strips is not more than

5.1.2 The nominal width of steel sheets and strips is not more than 2150 mm.

5.2 Recommended nominal dimensions

5.2.1 The nominal thickness of steel sheets and strips shall be within the range specified in 5.1.

5.2.2 The recommended nominal width of steel sheets and strips is any dimension in multiples of 10 mm.

5.2.3 The nominal length of steel sheets is within the range specified in 5.1. The recommended nominal length is any dimension in multiples of 50 mm.

6.1 Thickness tolerance

6.1.1 The thickness tolerance of steel sheets and strips of which the minimum yield strength R_e is less than 260 MPa shall comply with the requirements of Table 2.

6.1.5 When the yield strength is not specified in the product standard and the thickness tolerance is not specified, the thickness tolerance of steel sheets and strips shall be agreed upon between the supply and demand parties and indicated in the contract.

6.2 Width tolerance

6.2.1 The width tolerance of cut-edge steel sheets and wide strips shall comply with the requirements of Table

6. The width tolerance of mill-edge steel sheets and wide strips shall be agreed upon between the supply and demand parties.

6.3 Length tolerance The length tolerance of steel sheets shall comply with the requirements of Table

8. If the demand party requires supply according to the higher precision of length (PL.B), it shall be indicated in the contract. If not indicated, supply according to the general precision of length (PL.A).

7.1 Flatness

7.1.1 The flatness of steel sheets shall comply with the requirements of Table

9. If the demand party requires supply according to the higher precision of flatness (PF.B), it shall be indicated in the contract. If not indicated, supply according to the general precision of flatness (PF.A).

7.1.4 When the user has requirements for the flatness of steel strips, after the user has fully flattened the steel strips, the values specified in Table 9 are also applicable to steel sheets cut by the user from the steel strips.

7.1.5 When the yield strength is not specified in the product standard and the flatness is not